

Communicable Disease Newsletter

August 2023

Lyme Disease Surveillance: Who, What, Why?

WHO needs to be reporting?

All healthcare providers per the State of Illinois Administrative Code 690.200.

WHAT needs to be reported?

Providers are to complete the Lyme Disease form to accompany any positive test results for *Borrelia burgdorferi* and *Borrelia mayonii*.

WHY do we need surveillance?

- To better understand the high-risk areas of incidence, in absence of tick surveillance or tick testing processes available in Kane County
- Early identification prevents progression to disseminated disease
- Early treatment intervention
- To improve the tick control methods

Important Signs to Monitor:

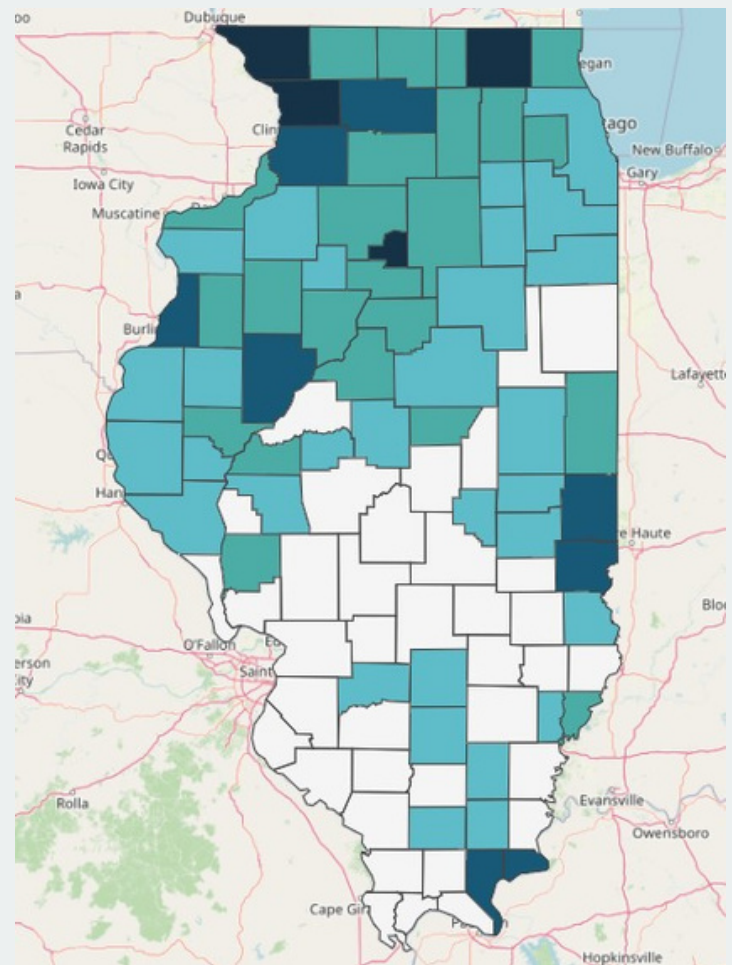
- Erythema Migrans rash
- Joint swelling
- Atrioventricular conduction defects
- Neurological Symptoms: such as, facial palsy, lymphocytic meningitis, radiculoneuropathy, and cranial neuritis

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TWO-TIER TESTING

- Immunoblot testing alone is NOT recommended for clinical diagnosis
- Two-Tier testing measures combined IgG and IgM antibodies



Source: Illinois Department of Public Health

Don't Forget to download the CDC Reference Manual

September 28: World Rabies Day

Rabies Potential Exposure Case Scenarios:

Scenario 1

One night a bat is found flying around inside a house. No one in the household woke up to the bat in their room, but all the bedroom doors were left open. The bat is not available for testing. In this scenario, would Post-Exposure Prophylaxis (PEP) be recommended for all family members?

- **Answer:** Since no one woke up to the bat in their room, PEP is NOT recommended.

Scenario 2

A woman woke up to a bat flying in her bedroom. The bat was found, tested, and confirmed to be rabid, so she goes to her local emergency room and is assessed for receiving PEP. In the ER, the provider administered the HRIG in the gluteus and the first Rabies vaccine dose in the left deltoid. Did the provider administer the HRIG and the Rabies vaccine correctly?

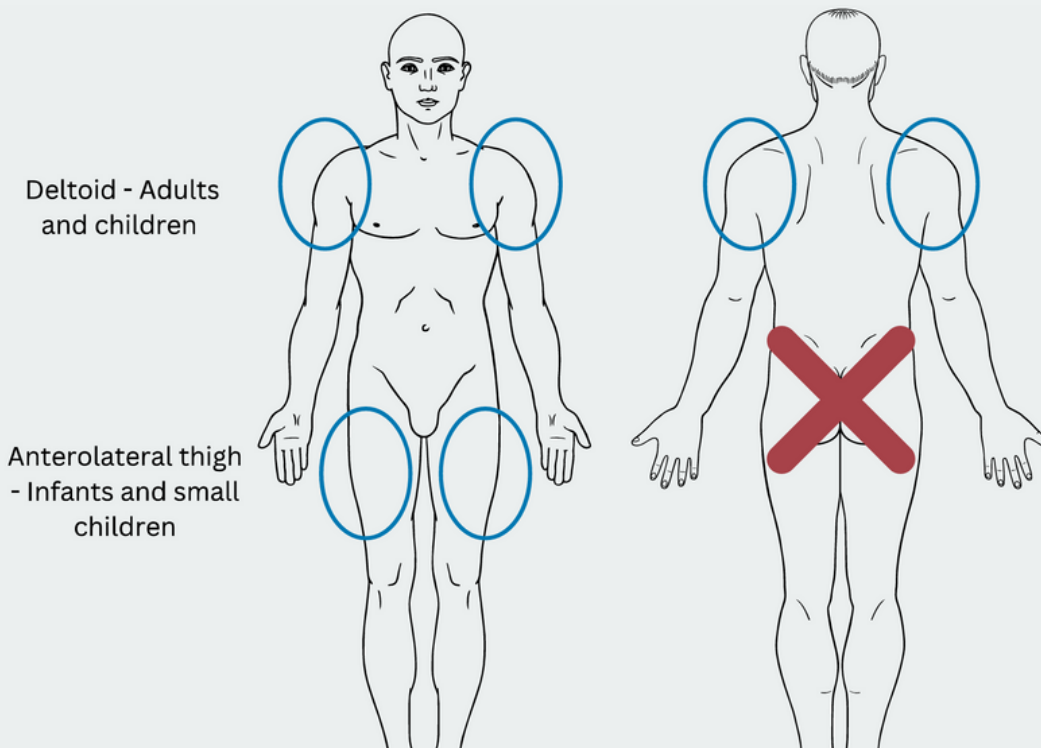
- **Answer:** No. HRIG is not supposed to be administered in the gluteus due to reduced response to the vaccine, and injury to the sciatic nerve. It should be administered in the deltoids.

Scenario 3

Animal control is called by concerned parents to pick up a stray dog that bit their child. The animal control workers were able to catch the dog and have it in custody. Is PEP recommended at this time?

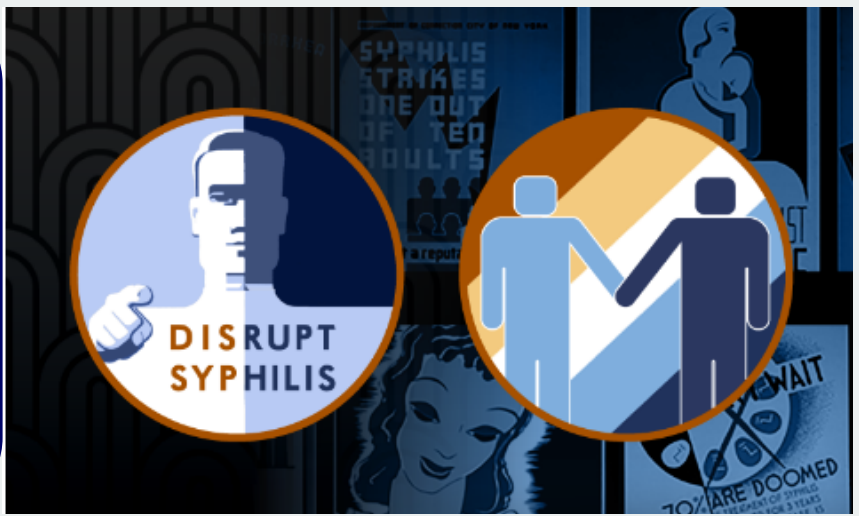
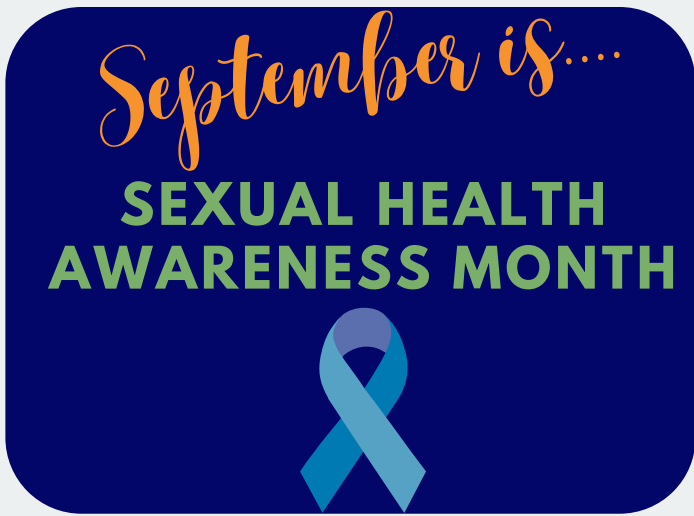
- **Answer:** No. PEP will be recommended based on the outcome of the 10 day quarantine period and testing of the brain tissue, if appropriate.

HRIG & Vaccine Administration Sites



RABIES VACCINATION GUIDE FOR HEALTHCARE PROVIDERS

Download the [Rabies Vaccination Guide](#) on the Kane County Health Department's website



What Do Healthcare Providers Need to Know about Syphilis and Pregnancy?

Syphilis Screening Recommendations:

Prenatal:

- 1st prenatal visit: All pregnant women.
- At ~28 weeks and at delivery: if at high risk (lives in a community with high syphilis morbidity or is at risk for syphilis acquisition during pregnancy [drug misuse, STIs during pregnancy, multiple partners, a new partner, partner with STIs]).

Neonates:

- No mother or newborn infant should leave the hospital without maternal syphilis serologic status having been documented at least once during pregnancy.

Stillborn:

- Any woman who delivers a stillborn infant should be tested for syphilis.

Important information about syphilis to remember:

- Benzathine Penicillin G is the first-line recommended treatment for syphilis and the only recommended treatment option for pregnant patients.
- To prevent progression of syphilis to later stages, it is crucial to start treatment soon after diagnosis.
- Pregnant women with syphilis at any stage who report penicillin allergy should be desensitized and treated with penicillin.
- All neonates with reactive nontreponemal tests should receive thorough follow-up examinations and serologic testing (i.e., RPR or VDRL) every 2–3 months until the test becomes nonreactive.
- Any woman who has a fetal death after 20 weeks' gestation should be tested for syphilis.
- Kane County Health Department can be contacted to check availability of past titer or treatment information of a patient.

Source: [Center for Disease Control and Prevention](#)

Kane County Communicable Disease Trends

Most Common Communicable Diseases Reported in Kane County Number of Cases between 2022 and 2023 in the Second Quarter

Disease	2022 - 2nd quarter	2023 - 2nd quarter
SARS-CoV-2 infection (COVID-19)	14197	1589
Chlamydia	552	543
Gonorrhea	129	85
Rabies, Potential Human Exposure	21	37
Campylobacteriosis	31	32
Hepatitis C Virus Chronic Infection	8	28
Salmonellosis	14	15
Shiga toxin-producing E.coli	12	10
Streptococcal Disease Invasive Group A%	2	10
Hepatitis B Chronic	4	8
Cryptosporidiosis	6	7
Lyme Disease	5	5
Shigellosis	3	5
Legionellosis - Legionnaires Disease	6	3
Cyclosporiasis	5	1
Influenza with ICU Hospitalization	11	1

The table above shows some of the most common communicable diseases reported in Kane County during the second quarter (April-June) of 2022 and 2023.

When compared between these time periods, similar to the first quarters, SARS-CoV-2 infection (COVID-19) decreased significantly by 89% in 2023. Cases that decreased significantly in the second quarter of 2023 include influenza with ICU hospitalization (by 91%), cyclosporiasis (by 80%), legionellosis (by 50%), and gonorrhea (by 34%).

Unlike the first quarters of these two years, a number of foodborne illnesses stayed the same in the second quarters, such as, campylobacteriosis, salmonellosis, cryptosporidiosis, shigellosis, and so did chlamydia and Lyme disease.

Similar to the first quarters, other communicable diseases that increased in the second quarter of 2023, were potential human exposure to rabies by 76% (from 21 to 37 cases), a sharp increase in streptococcal disease invasive Group A from 2 cases to 10 cases (400%), and hepatitis B chronic disease from 4 to 8 cases (100%). Additionally, in 2023 second quarter, hepatitis C virus chronic infection increased by 250%, from 8 to 28 cases.

Source: Illinois Department of Public Health (IDPH); Illinois National Electronic Disease Surveillance System (I-NEDSS) reports.

REPORTING REMINDER

All reportable diseases must be reported in I-NEDSS

Fillable forms are available for Lyme Disease, Babesiosis, and Healthcare Facility Encounters.

Fax to: 630-897-8128



Kane County Health Department
Communicable Disease Conference
October 2023
Stay tuned....